

Title (en)
DISTRIBUTED SMART GRID PROCESSING

Title (de)
VERARBEITUNG VERTEILTER INTELLIGENTER NETZE

Title (fr)
TRAITEMENT DE RÉSEAU INTELLIGENT RÉPARTI

Publication
EP 3117394 B1 20190109 (EN)

Application
EP 15761205 A 20150310

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Abstract (en)
[origin: US2015253367A1] A node within a wireless mesh network is configured to record a zero crossing of alternating current or alternating voltage drawn by a single-phase power consumer and a precise timestamp when the zero crossing occurred, thereby generating timestamped zero crossing data. The node receives similar zero crossing data from a neighboring node. The node then compares the timestamped zero crossing data with the received zero crossing data to determine whether the phase associated with the node is equivalent to, leads, or lags the phase associated with the neighboring node. The node then acquires a positive phase identification associated with the neighboring node. Based on the phase identification, and based on the phase difference between the two nodes, the node infers the phase associated with the single-phase power consumer. That phase indicates the specific power line within a three-phase power distribution network to which the single-phase power consumer is coupled.

IPC 8 full level
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CPC (source: EP US)
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